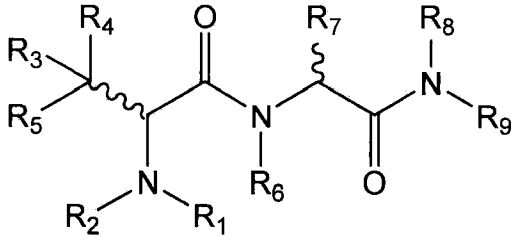
I. AMENDMENTS TO THE CLAIMS

Claims 1 to 22. (Canceled).

Claim 23. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



I

wherein:

R_1 and R_2 are independently selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, and the carbon atoms are optionally substituted with: -OH, -I, -Br, -Cl, -F, -CN, $-CO_2H$, -CHO, -COSH, or $-NO_2$;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

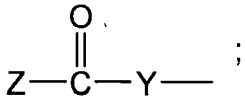
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, -

NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

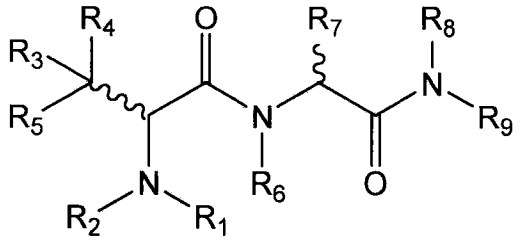
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, and pyrrolyl;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH_2; -$NRCH(R_{11})COOH$; and -$NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or -$(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and -$C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 24. (Withdrawn) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

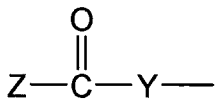
R_5 is selected from the group consisting of: naphthyl, anthracyl, ~~or~~ and pyrrolyl;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

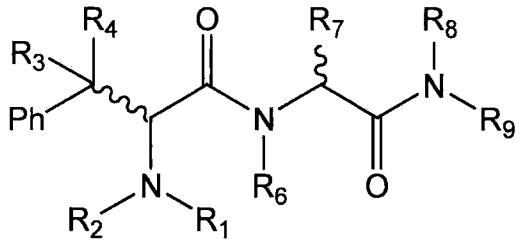
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 25. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, and the carbon atoms are optionally substituted with: -OH, -I, -Br, -Cl, -F, -CN, $-CO_2H$, -CHO, -COSH, or $-NO_2$;

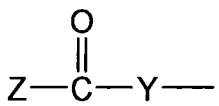
R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

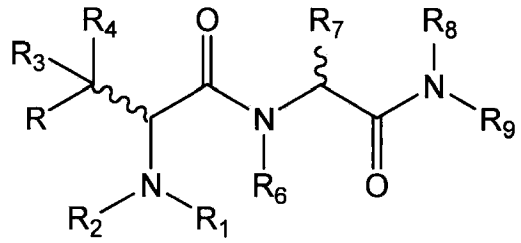
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 26. (Canceled).

Claim 27. (Withdrawn) A compound or pharmaceutically acceptable salt thereof, of the formula:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, and provided that if either one of R_1 and R_2 is H, each of R_3, R_4, R_6 and R_8 are H and R_5 is isopropyl or phenyl, and R_7 is methyl or benzyl, then for whichever of R_1 or R_2 is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R_1 and R_2 are joined to form a ring;

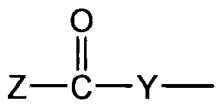
R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, -

NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

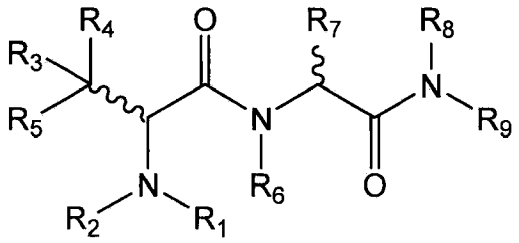
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH_2; -$NRCH(R_{11})COOH$; and -$NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or -$(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and -$C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 28. (Canceled)

Claim 29. (Withdrawn) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

one of R_3 and R_4 is H and the other of R_3 and R_4 is ArR- ;

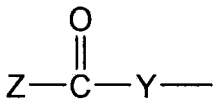
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F,

-CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

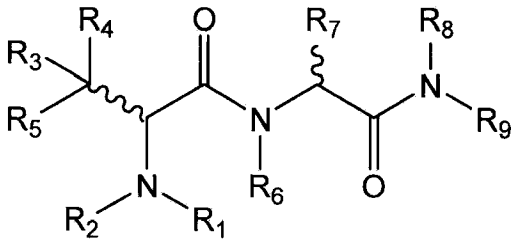
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH_2; -NRCH(R_{11})COOH; and -NRCH(R_{11})COOH, wherein R_{11} is a moiety having the formula: R, or -$(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and -C(NH)(NH_2), or pharmaceutically acceptable salt thereof.

Claim 30. (Canceled).

Claim 31. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring, or provided that where one of R_1 or R_2 is H, the other is not benzoyl;

R_3 and R_4 are independently selected from the group consisting of: methyl, ethyl, n-propyl and n-butyl;

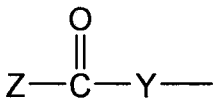
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

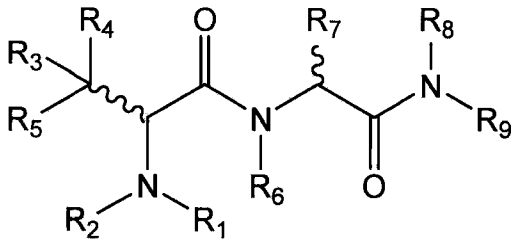
Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 32. (Previously Presented) The compound of claim 31, wherein R_3 and R_4 are each $-CH_3$.

Claim 33. (Previously Presented) The compound of claim 32, wherein R_5 is Ar.

Claim 34. (Withdrawn) A compound or pharmaceutically acceptable salt thereof, of the formula:



I

wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

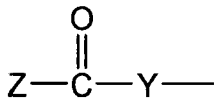
R_3 and R_4 are joined and form a moiety selected from the group consisting of β-cyclopropyl, β-cyclobutyl, β-cyclopentyl and β-cyclohexyl;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

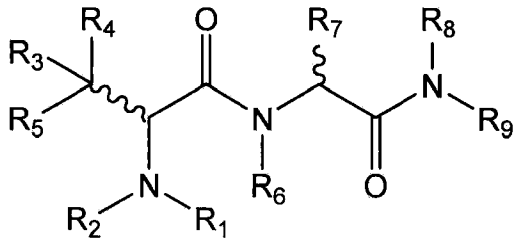
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 35. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of H, methyl, ethyl, propyl, n-butyl and acetyl;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

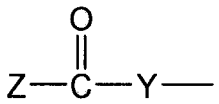
R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

provided that if either one of R_1 and R_2 is H, then each of R_3, R_4, R_6 and R_8 are H and R_5 is isopropyl or phenyl, and R_7 is methyl or benzyl;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group, the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl,

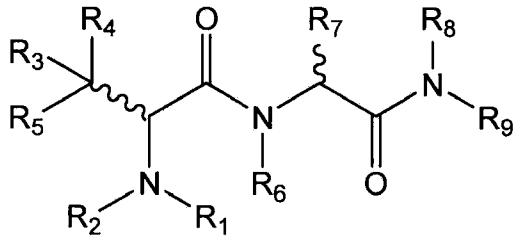
quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH_2; -$NRCH(R_{11})COOH$; and -$NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or -$(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and -C(NH)(NH_2), or pharmaceutically acceptable salt thereof.

Claim 36. (Withdrawn) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are joined and form a moiety selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

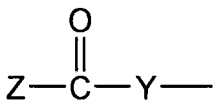
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group, the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

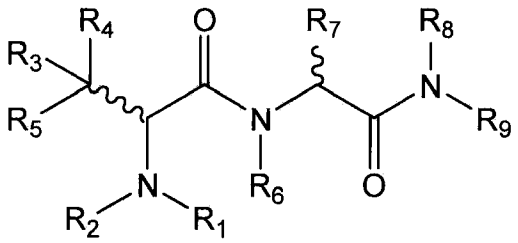
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH_2; -$NRCH(R_{11})COOH$; and -$NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or -$(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently

selected from the group consisting of: H; R; and -C(NH)(NH_2), or pharmaceutically acceptable salt thereof.

Claim 37. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently H, CH_3 or acetyl;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

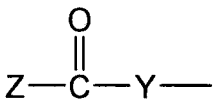
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; provided that if either one of R_1 and R_2 is H, then each of R_3, R_4, R_6 and R_8 are H and R_5 is isopropyl or phenyl, and R_7 is methyl or benzyl;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated

or unsaturated alkyl group, the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

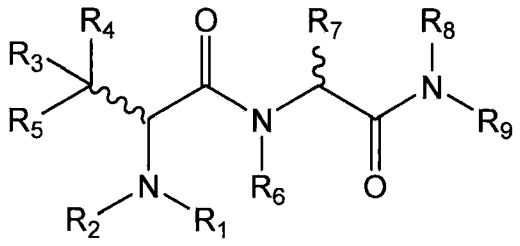
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH_2; -NRCH(R_{11})COOH; and -NRCH(R_{11})COOH, wherein R_{11} is a moiety having the formula: R, or -$(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and -C(NH)(NH_2), or pharmaceutically acceptable salt thereof.

Claim 38. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently H or CH_3;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

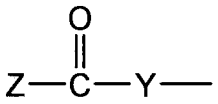
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; provided that if either one of R_1 and R_2 is H, then each of R_3, R_4, R_6 and R_8 are H and R_5 is isopropyl or phenyl, and R_7 is methyl or benzyl;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group, the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are

limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 39. (Previously Presented) The compound of claim 38, wherein R_1 is H, and R_2 is $-CH_3$.

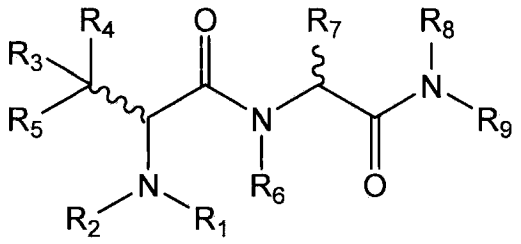
Claim 40. (Previously Presented) The compound of claim 38, wherein R_5 is Ar.

Claim 41. (Previously Presented) The compound of claim 38, wherein R_3 and R_4 are each $-CH_3$.

Claim 42. (Previously Presented) The compound of claim 41, wherein R_5 is Ar.

Claim 43. (Previously Presented) The compound of claim 42, wherein R_5 is phenyl.

Claim 44. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, and the carbon atoms are optionally substituted with: -OH, -I, -Br, -Cl, -F, -CN, $-CO_2H$, -CHO, -COSH, or $-NO_2$;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

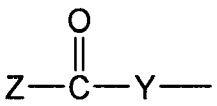
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is H or CH_3;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are

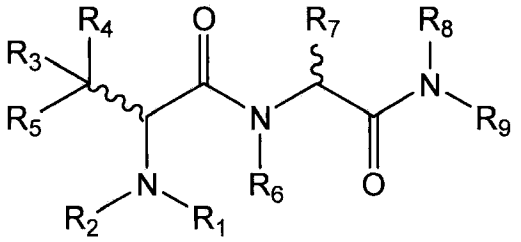
limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 45. (Previously Presented) The compound of claim 42, wherein R_6 is H or CH_3.

Claim 46. (Previously Presented) The compound of claim 45, wherein R_6 is H.

Claim 47. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, and the carbon atoms are optionally substituted with: -OH, -I, -Br, -Cl, -F, -CN, $-CO_2H$, -CHO, -COSH, or $-NO_2$;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

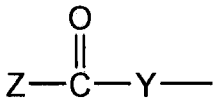
R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 is independently selected from the group consisting of: H, R, and ArR-;

R_8 is H or CH_3;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

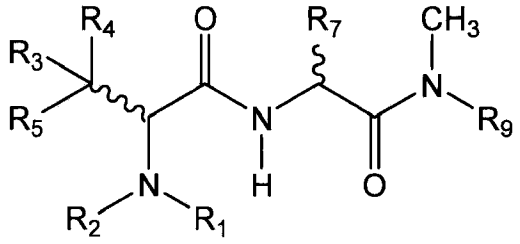
Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 48. (Previously Presented) The compound of claim 42, wherein R_8 is H or CH_3.

Claim 49. (Previously Presented) The compound of claim 45, wherein R_8 is H or CH_3.

Claim 50. (Previously Presented) The compound of claim 49, wherein R_8 is CH_3.

Claim 51. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

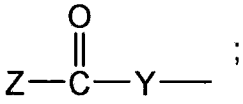
R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_7 is independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -

SOR_{10}, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

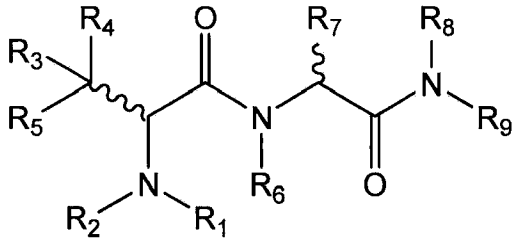
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 52. (Previously Presented) The compound of claim 42, wherein R_6 is H and R_8 is CH_3.

Claim 53. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

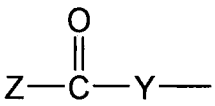
R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 is a three to six carbon atom, branched alkyl group;

R_8 is independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

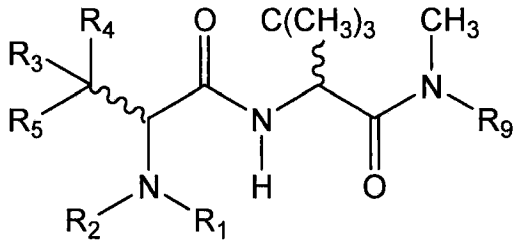
Claim 54. (Previously Presented) The compound of claim 42, wherein R_7 is a three to six carbon atom, branched alkyl group.

Claim 55. (Previously Presented) The compound of claim 45, wherein R_7 is a three to six carbon atom, branched alkyl group.

Claim 56. (Previously Presented) The compound of claim 49, wherein R_7 is a three to six carbon atom, branched alkyl group.

Claim 57. (Previously Presented) The compound of claim 53, wherein R_7 is $-C(CH_3)_3$.

Claim 58. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



wherein:

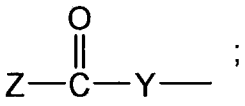
R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

and

R_9 is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

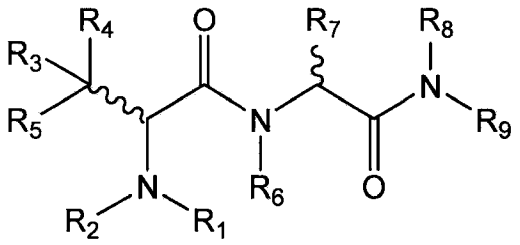
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 59. (Withdrawn) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

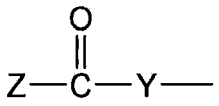
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

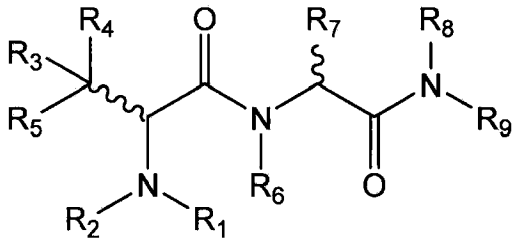
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is -$NHCH(R_{11})COOH$ or -$NCH_3CH(R_{11})COOH$, wherein R_{11} is R; or, -$(CH_2)_nNHC(NH)(NH_2)$.

Claim 60. (Withdrawn) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, and provided that if either one of R_1 and R_2 is H, each of R_3, R_4, R_6 and R_8 are H and R_5 is isopropyl or phenyl, and R_7 is methyl or benzyl, then for whichever of R_1 or R_2 is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

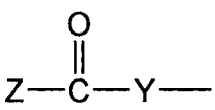
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms

are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

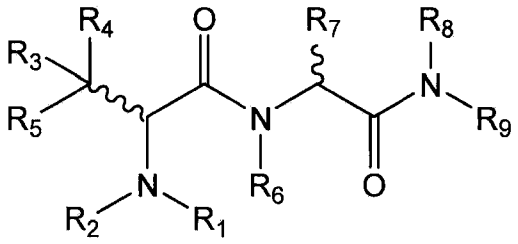
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is -OR_{14} in which R_{14} is a linear or branched one to six carbon alkyl group.

Claim 61. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; and

R_9 is Y-COOH;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

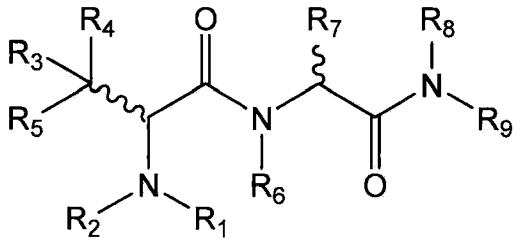
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X; and

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are

limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl.

Claim 62. (Withdrawn) A compound or pharmaceutically acceptable salt thereof, of the formula:



I

wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; and

R_9 is Y-$COOCH_3$;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

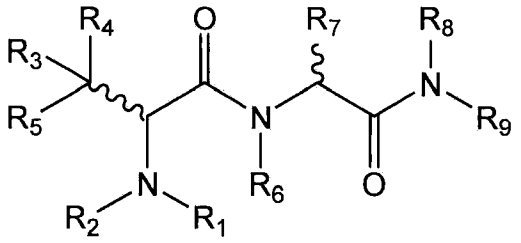
the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X; and

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl.

Claim 63. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



I

wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, and provided that if either one of R_1 and R_2 is H, each of R_3, R_4, R_6 and R_8 are H and R_5 is isopropyl or phenyl, and R_7 is methyl or benzyl, then for whichever of R_1 or R_2 is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10}

is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R_1 and R_2 are joined to form a ring;

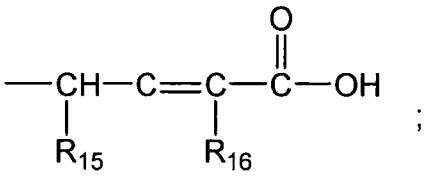
R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; and

R_9 has the formula:



;

wherein R_{15} is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R_{16} is selected from the group consisting of H, methyl, ethyl, propyl, iso-propyl, n-butyl, iso-butyl and sec-butyl;

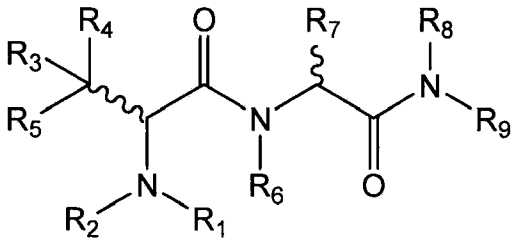
R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X; and

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$.

Claim 64. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



I

wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

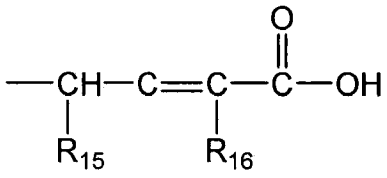
R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; and

R_9 has the formula:



;

wherein R_{15} is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R_{16} is methyl;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms

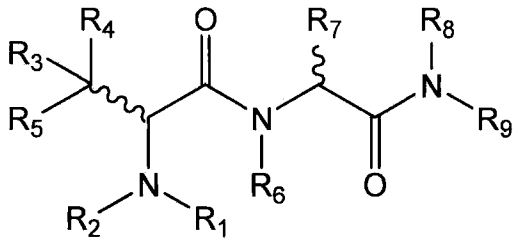
are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R; and

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X.

Claim 65. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



I

wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

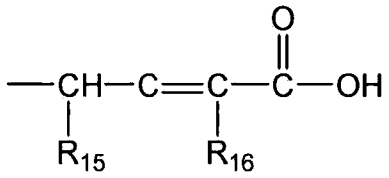
R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; and

R_9 has the formula:



;

wherein R_{15} is isopropyl and R_{16} is methyl;

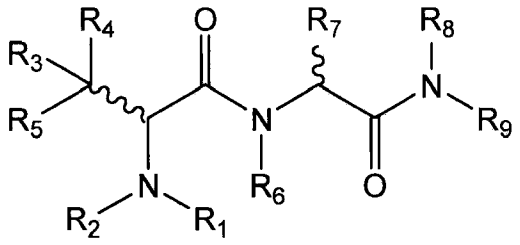
R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R; and

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X.

Claim 66. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



I

wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

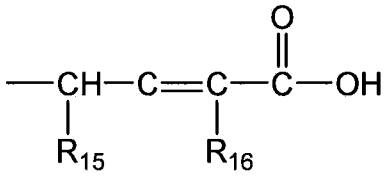
R_6 is H or CH_3;

R_7 is a three to six carbon atom, branched alkyl group;

R_8 is independently selected from the group consisting of: H, R, and ArR-;

and

R_9 has the formula:



;

wherein R_{15} is selected from the group consisting of: methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R_{16} is selected from the group consisting of H, methyl, ethyl, propyl, iso-propyl, n-butyl, iso-butyl and sec-butyl

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -

SOR_{10}, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

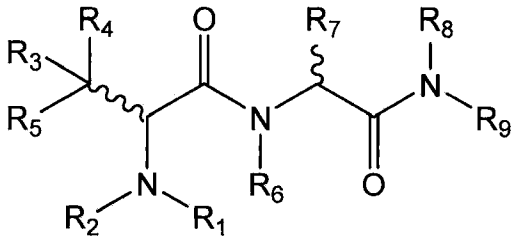
the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$; and

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X.

Claim 67. (Canceled)

Claim 68. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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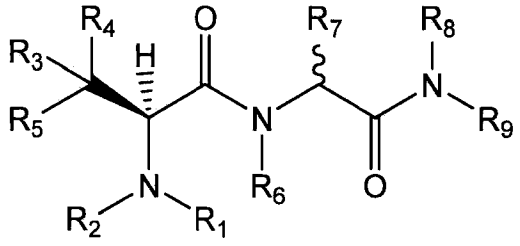
and having the configuration:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic

skeleton containing one to ten carbon atoms, and the carbon atoms are optionally substituted with: -OH, -I, -Br, -Cl, -F, -CN, -CO_2H, -CHO, -COSH, or -NO_2;

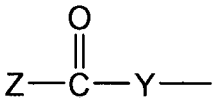
R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

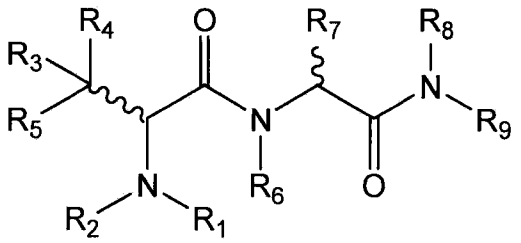
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 69. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, and the carbon atoms are optionally substituted with: -OH, -I, -Br, -Cl, -F, -CN, $-CO_2H$, -CHO, -COSH, or $-NO_2$;

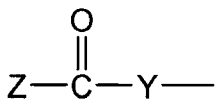
R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

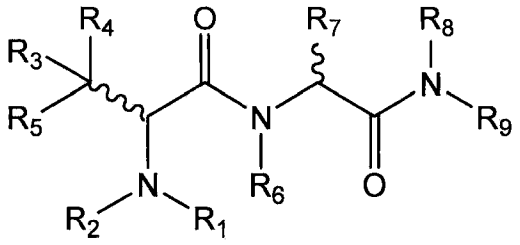
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl, wherein Y comprises a chiral center of the S-configuration and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH_2; -$NRCH(R_{11})COOH$; and -$NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or -$(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and -$C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 70. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



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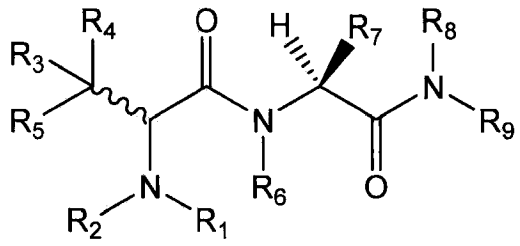
and having the configuration:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, and the carbon atoms are optionally substituted with: -OH, -I, -Br, -Cl, -F, -CN, -CO_2H, -CHO, -COSH, or -NO_2;

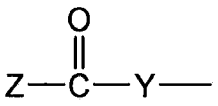
R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-; and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -

SOR_{10}, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

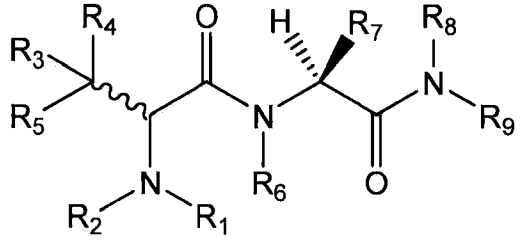
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

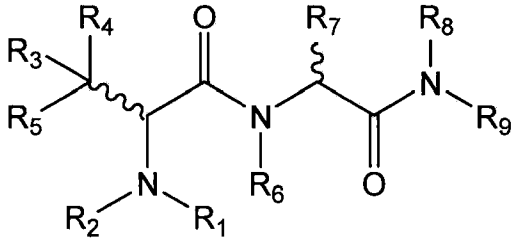
Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; $-NH_2$; $-NRCH(R_{11})COOH$; and $-NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or $-(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and $-C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof.

Claim 71. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the configuration:



and having the formula:



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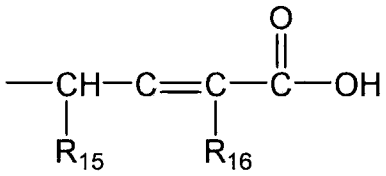
wherein R_5 is Ar; R_3 and R_4 are each CH_3; R_1, R_2, R_6 and R_8 are independently H or CH_3; R_7 is a three to six carbon branched alkyl group; and, R_9 has the formula



wherein R_{15} is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R_{16} is selected from the group consisting of H, methyl, ethyl, propyl, iso-propyl, n-butyl, iso-butyl and sec-butyl;

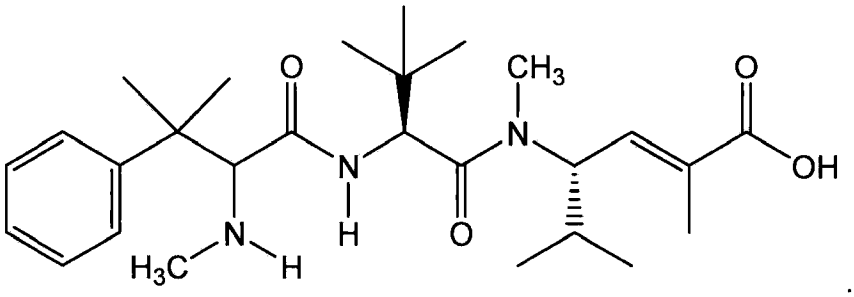
R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

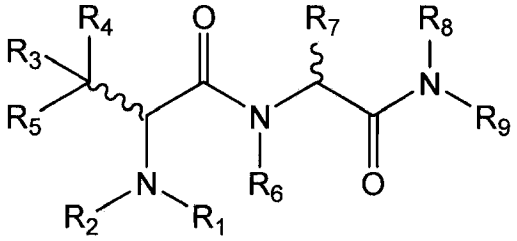
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X.

Claim 72. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



Claim 73. (Previously Presented) A pharmaceutical composition comprising a compound or pharmaceutically acceptable salt thereof, of the formula



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wherein:

R_1 and R_2 are independently selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, and the carbon atoms are optionally substituted with: -OH, -I, -Br, -Cl, -F, -CN, -CO_2H, -CHO, -COSH, or -NO_2;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

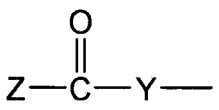
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

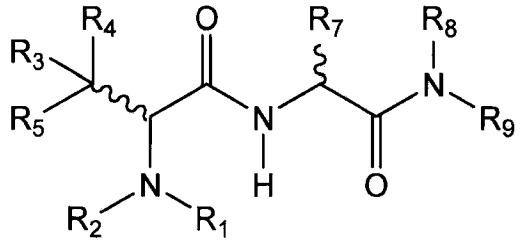
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R_8 is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH_2; -$NRCH(R_{11})COOH$; and -$NRCH(R_{11})COOH$, wherein R_{11} is a moiety having the formula: R, or -$(CH_2)_nNR_{12}R_{13}$, wherein n=1-4 and R_{12} and R_{13} are independently selected from the group consisting of: H; R; and -$C(NH)(NH_2)$, or pharmaceutically acceptable salt thereof; and an acceptable pharmaceutical excipient.

Claim 74. (Currently Amended) A method of ~~treating tumors by arresting cell~~ inhibiting mitosis of a tumor cell ~~in a patient in need of such treatment~~ comprising ~~administering to said patient an anti-mitotic~~ contacting the tumor cell with an effective amount of ~~at least one~~ a compound [[of]] according to claim [[22]] 23.

Claim 75. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, and the carbon atoms are optionally substituted with: -OH, -I, -Br, -Cl, -F, -CN, -CO_2H, -CHO, -COSH, and -NO_2;

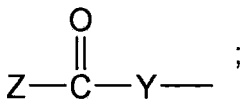
R_3 and R_4 are H or a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic alkyl containing one to ten carbon atoms optionally substituted with: =O, =S, -OH, -SH, -NH_2, -I, -Br, -Cl, -F, -CN, -CO_2H, -CHO, -$CONH_2$, -COSH, -NO_2, -SO_3H, or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_7 is ArR- or a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -SH, -NH_2, -I, -Br, -Cl, -F, -CN, -CO_2H, -CHO, -$CONH_2$, -COSH, -NO_2;

R_8 is selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms optionally substituted with -OH; and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms

are optionally substituted with: =O, =S, -OH, -OR_{10}, -O_2CR_{10}, -SH, -SR_{10}, -$SOCR_{10}$, -NH_2, -NHR_{10}, -$N(R_{10})_2$, -$NHCOR_{10}$, -$NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R_{10}, -CHO, -COR_{10}, -$CONH_2$, -$CONHR_{10}$, -$CON(R_{10})_2$, -COSH, -$COSR_{10}$, -NO_2, -SO_3H, -SOR_{10}, -SO_2R_{10}, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O_2CR, -SH, -SR, -SOCR, -NH_2, -NHR, -$N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO_2H, -CO_2R, -CHO, -COR, -$CONH_2$, -CONHR, -$CON(R)_2$, -COSH, -COSR, -NO_2, -SO_3H, -SOR, and -SO_2R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with:

(a) phenyl,

(b) naphthyl,

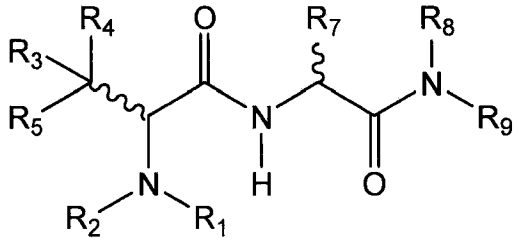
(c) anthracyl,

(d) phenanthryl, or

(e) a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton consisting of one to ten carbon atoms optionally substituted with: =S, -OH; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH_2; or pharmaceutically acceptable salt thereof.

Claim 76. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, of the formula:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H, methyl, ethyl, propyl and n-butyl;

R_3 and R_4 are independently selected from the group consisting of H, methyl, ethyl, n-propyl and n-butyl, or R_3 and R_4 are joined to form a three to seven member non-aromatic ring;

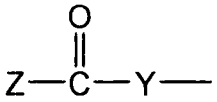
R_5 is selected from the group consisting of: R, ArR-, and Ar;

R_7 is ArR- or a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, -OH, -SH, $-NH_2$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, -CHO;

R_8 is selected from the group consisting of: H and CH_3;

and

R_9 is:



;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, $-OR_{10}$, $-O_2CR_{10}$, -SH, $-SR_{10}$, $-SOCR_{10}$, $-NH_2$, $-NHR_{10}$, $-N(R_{10})_2$, $-NHCOR_{10}$, $-NR_{10}COR_{10}$, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R_{10}$, -CHO, $-COR_{10}$, $-CONH_2$, $-CONHR_{10}$, $-CON(R_{10})_2$, -COSH, $-COSR_{10}$, $-NO_2$, $-SO_3H$, $-SOR_{10}$, $-SO_2R_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven member non-aromatic cyclic skeleton within the definition of R,

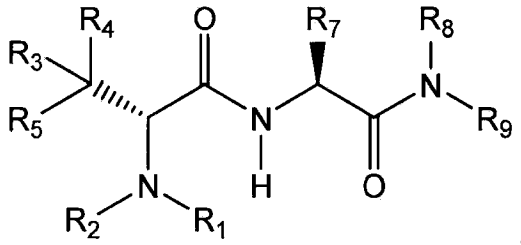
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, $-O_2CR$, -SH, -SR, -SOCR, $-NH_2$, -NHR, $-N(R)_2$, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, $-CO_2H$, $-CO_2R$, -CHO, -COR, $-CONH_2$, -CONHR, $-CON(R)_2$, -COSH, -COSR, $-NO_2$, $-SO_3H$, -SOR, and $-SO_2R$;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

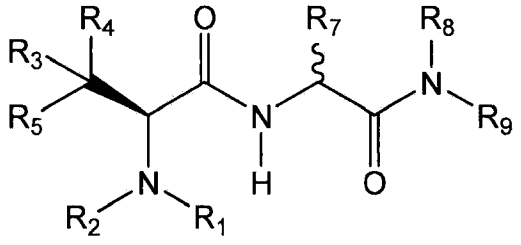
Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with phenyl, naphthyl, anthracyl, phenanthryl or a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms optionally substituted with: =S, -OH; and

Z is defined as a moiety selected from the group consisting of: -OH; -OR; -SH; -SR; $-NH_2$; or pharmaceutically acceptable salt thereof.

Claim 77. (Previously Presented) The compound of claim 75, of the configuration:



Claim 78. (Previously Presented) The compound of claim 75, of the configuration:



Claim 79. (New) A method for treating colon cancer comprising administering to a patient in need thereof an anti-mitotic effective amount of a compound according to claim 23.

Claim 80. (New) A method of treating breast cancer comprising administering to a patient in need thereof an anti-mitotic effective amount of a compound according to claim 23.

Claim 81. (New) A method of treating lung cancer comprising administering to a patient in need thereof an anti-mitotic effective amount of a compound according to claim 23.